Clarke®

air

HUNTER
AIR COMPRESSOR

OPERATION & MAINTENANCE INSTRUCTIONS

© 0407

SPECIFICATIONS

Electrical Supply	230 V, 1 Phase 50Hz
Motor Rating	2.5 HP
Max. Air Pressure	8 bar (115 lbf/in^2)
Air Displacement	12.5 cuft/min
Duty Cycle	S1 (continuous)
Operating Temperature	0ºC - 35ºC
Sound Power Level	93 dB L_{WA}
Air Receiver	50 litre
Nett Weight	44 kg
Dimensions	730 x 315 x 650 mm
Compressor Oil	CLARKE SAE 40
Part No.	2130020

Please note that the details and specifications contained herein, are correct at the time of going to print. However, CLARKE International reserve the right to change specifications at any time without prior notice. Always consult the machine's data plate

DECLARATION OF CONFORMITY

We declare that this product complies with the following standards/directives

- **97/23/EEC**
- **98/37/EEC**
- **2000/14/EC ANNEX V1 PROCEDURE 1**

Notified Body: **TUV Product Service: 16th Floor. West Building, 775, Middle Huaiai Rd, Shanghai, China**

Measured Sound Power Level	Guaranteed Sound Power Level
92 dBL*WA*	**93** dBL*WA*

Description: **AIR COMPRESSOR**

Model No: **HUNTER**

Serial (Batch) No: **See product Data Plate**

Signed: _____

Engineering Manager

DOC No. HO75/27

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Thank you for purchasing this CLARKE HUNTER Air Compressor, which is designed for hobby and DIY use only.
Please read this leaflet thoroughly and carefully follow all instructions. In doing so you will ensure the safety of yourself and that of others around you, and you can look forward to the compressor giving you long and satisfactory service.

GUARANTEE

This product is guaranteed against faulty manufacture for a period of 12 months from the date of purchase. Please keep your receipt as proof of purchase.

This guarantee is invalid if the product is found to have been abused or tampered with in any way, or not used for the purpose for which it was intended.

Faulty goods should be returned to their place of purchase, no product can be returned without prior permission.

This guarantee does not effect your statutory rights.

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Do NOT dispose of this product with general household waste. It must be disposed of according to all laws governing waste electrical and electronic waste at a proper disposal facility

SAFETY PRECAUTIONS

WARNING

As with all machinery, there are certain hazards involved with their operation and use. Exercising respect and caution will considerably lessen the risk of personal injury. However, if normal safety precautions are overlooked, or ignored, personal injury to the operator, or damage to property may result. It is in your own interest to read and pay attention to the following rules:

1. COMPRESSED AIR IS DANGEROUS, NEVER direct a jet of air at people or animals, and NEVER discharge compressed air against the skin.
2. DO NOT operate your compressor with any guards removed.
3. Electrical or mechanical repairs should only be carried out by a qualified engineer. If problems occur, contact your Clarke dealer.
4. Before carrying out any maintenance, ensure the pressure is expelled from the air receiver, and the machine is disconnected from the mains.
5. DO NOT leave pressure in the receiver overnight, or when transporting.
6. DO NOT adjust, or tamper with the safety valves. The maximum pressure is factory set, and clearly marked on the machine.
7. DO NOT operate in wet or damp conditions. Keep the machine dry at alll times.
8. A clean atmosphere will ensure efficient operation. Do not use in dusty or otherwise dirty locations.
9. Some of the metal parts can become quite hot during operation. Take care not to touch these until the machine has cooled down.
10. Always adjust the pressure regulator to the recommended setting for the particular spray gun or tool being used.
11. When spraying inflammable materials e.g. cellulose paint, ensure there is adequate ventilation and keep clear of any possible source of ignition.
12. Protect yourself. Think carefully about any potential hazards which may be created by using the air compressor and use the appropriate protection. e.g. Goggles will protect your eyes from flying particles. Face masks will protect you against paint spray and/or fumes.
13. Before spraying any material always consult paint manufacturers instructions for safety and usage.
14. Personal safety products can be obtained from your local dealer.
15. Do not exert any strain on electrical cables and ensure that air hoses are not tangled or wrapped around machinery etc.

16. When disconnecting air hoses or other equipment from your compressor ensure that the air supply is turned off at the machine outlet and expel all pressurised air from within the machine and other equipment attached to it.
17. Make sure that children and animals are kept well away from the compressor and any equipment attached to it.
18. Always ensure that all individuals using the compressor have read and fully understand the Operating Instructions supplied.

ASSEMBLY

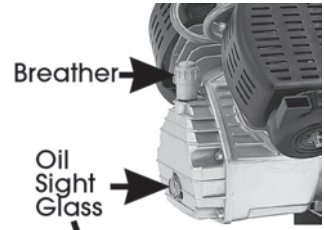
The wheel assemblies are packed separately. The method of assembly is shown on the right.

Thread the bolt through the wheel hub, through the hole in the support bracket.

Thread on the spring washer, screw on the nut and tighten.

When attaching the wheels, do not tip the machine on to its side.

Screw on the air filter assembly fully.



IMPORTANT!
Remove the breather - see opposite, and use a funnel to fill the machine with oil (supplied).

Check to ensure the oil level is midway across the sight glass, as shown opposite.
Compressor oil is also available from your Clarke dealer.

ELECTRICAL CONNECTIONS

Connect the mains lead to a standard, 230 Volt (50Hz) electrical supply through an approved 13 amp BS 1363 plug, or a suitably fused isolator switch.

WARNING! THIS APPLIANCE MUST BE EARTHED

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow	-	Earth
Blue	-	Neutral
Brown	-	Live

As the colours of the flexible lead of this appliance may not correspond with the coloured markings identifying terminals in your plug proceed as follows:

- Connect GREEN & YELLOW cord to terminal marked with a letter "E" or Earth symbol "⏚" or coloured GREEN or GREEN & YELLOW.
- Connect BROWN cord to terminal marked with a letter "L" or coloured RED.
- Connect BLUE cord to terminal marked with a letter "N" or coloured BLACK.

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-rewireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. When replacing a detachable fuse carrier, ensure the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

FUSE RATING

The fuse in the plug must be replaced with one of the same rating **(13 amps)** and this replacement must be ASTA approved to BS1362.

We strongly recommend that this machine is connected to the mains supply via a Residual Current Device (RCD)

If in any doubt, consult a qualified electrician. DO NOT attempt any repairs yourself.

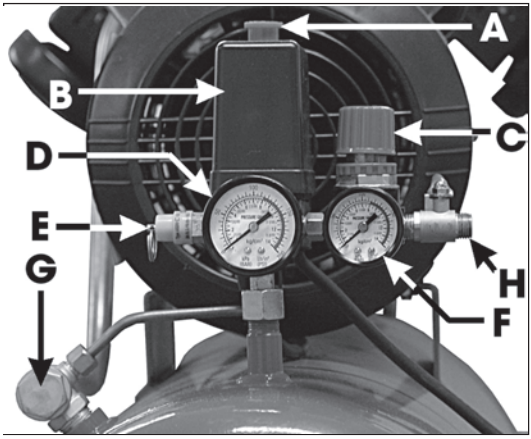
OPERATION

Before connecting your Hunter to the mains supply, check the following:-

- The mains voltage is 230V.
- The ON/OFF control knob (A) is in the OFF (lower) position.
- The pressure regulator (C) should be set at its lowest setting, i.e. turned fully anticlockwise.
- If the machine has not been used for 24 hours or so, open the drain valve, located beneath the reservoir, to drain any condensate which may have accumulated. When clear, close the valve - finger tight.

IMPORTANT: If the receiver is under pressure, keep your hands well away from the air being expelled.... remember, compressed air is DANGEROUS!

Fig.1



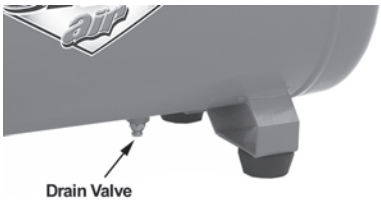
A. ON/OFF Knob
B. Pressure Regulator and Cutout
C. Air Pressure Regulator Knob
D. Air Tank Pressure gauge
E. Safety Valve
F. Air Outlet Pressure gauge
G. Non-Return Valve
H. Air Outlet

Connect a suitable air hose, with a 1/4 BSP connector, between the air outlet (H) and the spray gun or air tool being used.

Quick Fit couplings may be used to facilitate quick and simple changing of air tools. These are available from your Clarke dealer.

Open the drain valve to prevent initial loading.

Once the hose connections are complete, CHECK AGAIN to ensure the pressure regulator (C) is turned fully anticlockwise so that compressed air cannot reach the air tool, then switch the compressor ON, by lifting the ON/OFF knob (A), until it clicks into the upper position.



The air compressor will now start.

Should the motor fail to start immediately, it is probable that the air receiver is already full of air. Check the tank pressure gauge (D). If you release air, by opening air outlet tap (H), the motor will start automatically once the cut-in pressure is reached.

If this is not the case, it is possible that the thermal overload has intervened. This is a safety device to prevent the motor from overheating. The device will reset when the temperature falls to a predetermined level. In this event, switch OFF the machine and wait for 5 - 10 minutes, depending upon ambient temperature, press the reset button and attempt to restart. If the motor fails to start, after several attempts, consult your Clarke dealer.

Once the machine has started and run for a few minutes, close the drain valve, the pressure will build up in the receiver to a regulated max. pressure of 8 Bar (115 psi).

Turn ON the air supply to your air tool by opening the tap (H), and turn the pressure regulator (C) clockwise so that your chosen setting, is shown on the air outlet pressure gauge.

Check to ensure that there are no air leaks at any of the couplings or in other parts of the system before operating the spray gun or air tool in the normal way. If any leaks are apparent, switch OFF the machine by pushing the ON/OFF knob downwards, close the outlet tap and rectify before proceeding.

When the compressor reaches its maximum working pressure, the motor will automatically cut out, and will restart when the pressure has fallen by approximately 20 psi. This automatic STOP/START process will continue, as necessary, to maintain pressure in the receiver.

Periodically check to make sure the cylonder head bolts are securely tightened.

When you have finished the job in hand **ALWAYS** switch OFF at the ON/OFF switch, NOT the mains supply, and release any pressure remaining in the system by opening the drain valve until all air is expelled. This also allows any condensate to drain off.

ALWAYS operate the air tool to further ensure that there is no pressure in the system **BEFORE** disconnecting the tool. Finally, reset the pressure regulator to zero by turning the knob fully anticlockwise.

ROUTINE MAINTENANCE

IMPORTANT: Before carrying out any of this service work, always disconnect the machine from the mains supply, drain the air receiver and, if necessary, allow the machine to cool down before starting work.

Daily

Before use, always open the drain valve to ensure that any condensate, which may have accumulated, is drained off.

Before use, make sure the cylinder head bolts are securely tightened.

Monthly

It is important to keep the Compressor clean, with the help of a small soft brush and vacuum cleaner. In particular, the air intake filter should be inspected at least **MONTHLY**, and more often in dusty conditions, so that it is always kept free of any dirt particles, which if not cleaned away will affect the performance of the machine.

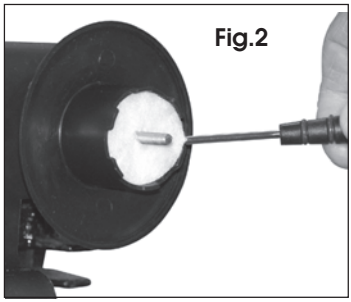


Fig.2

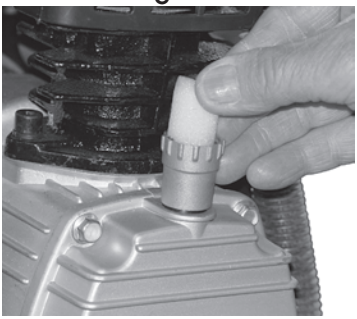
To clean the air intake filter, unscrew the cover and carefully prise out the element shown in Fig.2. Clean the inner housing using a cloth or brush.

If the filter is clogged or badly blackened, it should be replaced. It is not possible to wash the filter

Fig.3

Check the oil level, which should be midway across the sight glass, as shown in Fig.3.
Remove the breather and top up, using a funnel, with Clarke compressor oil (SAE40).
Drain and replace the oil after 6 months.

Fig. 4



When replacing the breather, unscrew the cap and check the filter for cleanliness as shown in Fig.4. if it is badly contaminated, it should be replaced, otherwise, it may be washed gently in soapy water, rinsed thoroughly and dried before replacing

TROUBLE SHOOTING

With considerate use, your CLARKE Air Compressor should provide you with long and trouble free service. Routine checks should be made on both the electrical supply as well as on all the compressed air lines and connections. If any fault appears, the reason for which is not immediately obvious, we recommend that you contact your local CLARKE Dealer.

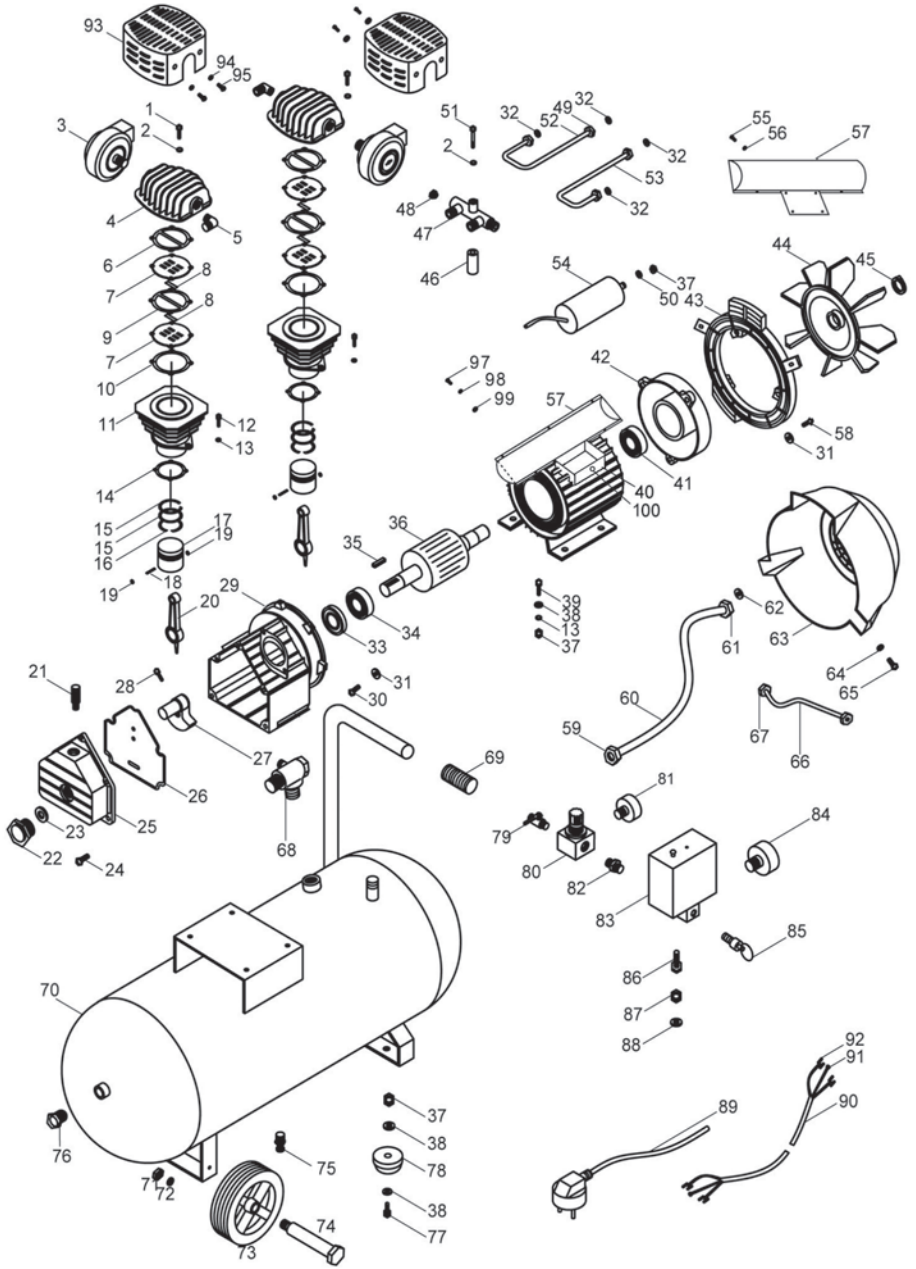
PROBLEM	PROBABLE CAUSE	REMEDY
The compressor stops and will not start again.	Bad connections. Overload cutout switch has tripped. Motor windings burnt out.	Check electrical connections. Clean and tighten as necessary. Switch off and wait 5 minutes before switching on. Contact your local dealer for a replacement motor.
The compressor does not reach the set pressure and overheats easily.	Compressor head gasket blown or valve broken.	Wait for compressor to cool down, disassemble head and replace any broken components. Carefully clean all sealing surfaces before reassem-bling. If in doubt contact your CLARKE dealer.
Compressor does not start.	Air receiver charged	Open drain cock to expel air. Compressor should start again when pressure reduces to approx. 95 psi.

CAUTION Do not attempt any repair or adjustment if you are uncertain as to how it should be done. If you have any queries, contact your local CLARKE Dealer.

PARTS LIST

No.	Description	Qty	Part No.
1	Hex Skt Hd Bolt M6X55	8	HTHUN001
2	Spring Washer 6	9	HTHUN002
3	Air Filter	2	HTHUN003
4	Cylinder Head	2	HTHUN004
5	Elbow	2	HTHUN005
6	Cylinder Gasket	2	HTHUN006
7	Valve Assembly	4	HTHUN007
8	Valve	4	HTHUN008
9	Gasket	2	HTHUN009
10	Cylinder Gasket	2	HTHUN010
11	Cylinder	2	HTHUN011
12	Bolt M8X25	4	HTHUN012
13	Spring Washer	8	HTHUN013
14	Spring Gasket	2	HTHUN014
15	Piston Ring	4	HTHUN015
16	Scraper Ring	2	HTHUN016
17	Piston	2	HTHUN017
18	Gudgeon Pin	2	HTHUN018
19	Girclip	4	HTHUN019
20	Connecting Rod	2	HTHUN020
21	Oil Breather	1	HTHUN021
22	Oil Sight Glass G1/2	1	HTHUN022
23	Gasket	1	HTHUN023
24	Bolt M6x16	5	HTHUN024
25	End Casing	1	HTHUN025
26	Gasket	1	HTHUN026
27	Crank Shaft	1	HTHUN027
28	Bolt M8x35	1	HTHUN028
29	Crankcase	1	HTHUN029
30	Bolt M5x25	3	HTHUN030
31	Washer	3	HTHUN031
32	Olive	4	HTHUN032
33	Shaft Seal	1	HTHUN033
34	Bearing	1	HTHUN034
35	Flat Key	1	HTHUN035
36	Rotor	1	HTHUN036
37	Nut M8	7	HTHUN037
38	Washer	8	HTHUN038
39	Bolt M8x25	4	HTHUN039
40	Statot	1	HTHUN040
41	Bearing	1	HTHUN041
42	Back Cap	1	HTHUN042
43	Lining	1	HTHUN043
44	Fan	1	HTHUN044
45	Retainer Ring	1	HTHUN045
46	Bush	1	HTHUN046
47	Mainfold	1	HTHUN047
48	Unloader Valve	1	HTHUN048
49	Nut M16x1.5	4	HTHUN049
50	Washer	1	HTHUN050
51	Bolt M6x45	1	HTHUN051
52	Pipe(u)	1	HTHUN052
53	Pipe(u)	1	HTHUN053
54	Capacitor	1	HTHUN054
55	Screw M3X5	5	HTHUN055
56	Washer	5	HTHUN056
57	Capacitor Enclosure	1	HTHUN057
58	Bolt M5x40	3	HTHUN058
59	Nut G 1/2	1	HTHUN059
60	Exhaust Pipe	1	HTHUN060
61	Nut	1	HTHUN061
62	Olive	1	HTHUN062
63	Fan cover	1	HTHUN063
64	Washer 5	2	HTHUN064
65	Screw M2X15	2	HTHUN065
66	Unloader Pipe	1	HTHUN066
67	Nut M1	1	HTHUN067
68	Check Valve	1	HTHUN068
69	Handle	1	HTHUN069
70	Tank	1	HTHUN070
71	Nut M12	2	HTHUN071
72	Spring Washer 12	2	HTHUN072
73	Wheel 7"	2	HTHUN073
74	Wheel Axle Bolt	2	HTHUN074
75	Drain Valve	1	HTHUN075
76	Tank End Cap	2	HTHUN076
77	Bolt M8x20	2	HTHUN077
78	Foot	2	HTHUN078
79	Air Tap	1	HTHUN079
80	Pressure Regulator	1	HTHUN080
81	Outlet Press. Gauge	1	HTHUN081
82	Connector	1	HTHUN082
83	Pressure Switch	1	HTHUN083
84	Tank Pressure Gauge	1	HTHUN084
85	Safety Valve	1	HTHUN085
86	Connector	1	HTHUN086
87	Nut	1	HTHUN087
88	Gasket	1	HTHUN088
89	Plug	1	HTHUN089
90	Power cable	1	HTHUN090
91	Cable Conn.(o)	3	HTHUN091
92	Cable Conn.(u)	8	HTHUN092
93	Cover	2	HTHUN093
94	Washer	4	HTHUN094
95	Screw	4	HTHUN095
96	Air Filter Element	2	HTHUN096
97	Screw M3X8	4	HTHUN097
98	Spring Washer	4	HTHUN098
99	Washer	4	HTHUN099
100	Reset button	1	HTHUN100

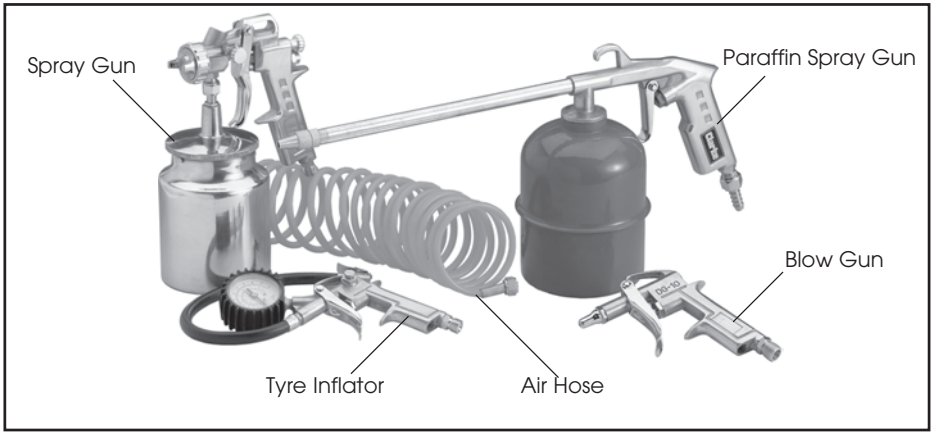
PARTS IDENTIFICATION



ACCESSORIES

Your Clarke Hunter Oil Free Air Compressor can be used in conjunction with a range of optional accessories for inflating tyres, air brushing, stapling, blowing and many other uses. For details contact your local accessory stockist. A complete kit is available from your Clarke dealer which is ideal for almost all applications.

Please quote part number 3110155



Should you experience any difficulties obtaining accessories, please contact the Clarke Sales Department (telephone 01992 565300) for details of your nearest dealer.

SPARE PARTS AND SERVICE

For Spare Parts and Service,please contact your nearest dealer, or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

PARTS & SERVICE FAX: 020 8558 3622

or e-mail as follows:

PARTS: Parts@clarkeinternational.com

SERVICE: Service@clarkeinternational.com

PAINT SPRAYING HINTS

WARNING

NEVER attempt to spray unless you are wearing suitable, approved respiratory and eye protection.
REMEMBER that some modern paints require specialist respiratory protection...always consult the paint manufacturers instructions.

1. GENERAL PREPARATION

a. Ensure that the area in which you will be spraying is clean and dust free.

b. Connect spray gun to compressor via suitable flexible hose.

c. With no paint in spray gun, test system for air leaks.

d. Cover adjacent pieces of equipment to prevent overspray. Mask areas of the article not to be sprayed.

e. Ensure surface to be painted is clean, dry and free from oil and dust. Check paint manufacturer's instructions for any special surface preparation required.

REMEMBER - TIME SPENT PREPARING SAVES TIME SPENT FINISHING

2. PAINT PREPARATION

a. Achieve the correct paint viscosity. This should be done according to paint manufacturer's instructions, and will vary according to type of paint.

b. Having mixed the paint thoroughly in a separate container, pour into the spray gun paint container through a fine filter.

DO NOT OVERFILL SPRAY GUN PAINT CONTAINER - three quarters full is maximum

c. It is usually best to experiment with a couple of practice spray coats on a piece of material with the same type of surface as the article you wish to spray, eg. metal for a car body panel, wood for a piece of furniture etc.

Some common problems:

PROBLEM	CAUSE	CORRECTION
Paint does not atomise (comes out in blobs)	Paint is too thick, air pressure is too low. above 50 psi, unless	Add thinners Increase air pressure (not specified by paint manuf.
Paint dries before hitting surface, leaving it dry with a rough texture	Paint is too thin. Air pressure is too high	Add more paint. Reduce air pressure
Finish is pitted like Orange peel	Air pressure too high or spray too close to work	Reduce air pressure, increase distance between gun and work.

For a professional looking finish paint must be thinned. If the manufacturers recommendations on thinning are not available, the following can be used as a general guide: Water based paints (emulsions) - 10-20% water

Oil based paints (gloss) - up to 10% white spirit thinners

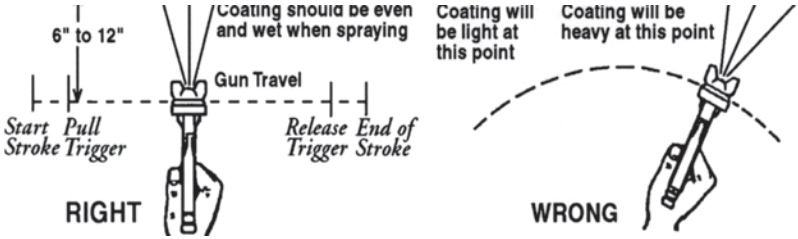
Cellulose paints - up to 50% cellulose thinners

3. HANDLING THE GUN

The first requirement for a good resultant finish is the proper handling of the gun. The gun should be held perpendicular to the surface being covered and moved parallel to it. The stroke should be started before the trigger is pulled and the trigger should be released before the stroke is ended. This gives accurate control of the gun and material.

The distance between gun and surface should be 6 to 12 inches depending on material and atomizing pressure. The material deposited should always be even and wet. Lap each stroke over the preceding stroke to obtain a uniform finish.

NOTE: To reduce overspray and obtain maximum efficiency, always spray with the lowest possible atomizing air pressure.



4. SPRAY GUN MAINTENANCE

1. Immerse only the front end of the gun until solvent just covers the fluid connection.
2. Use a bristle brush and solvent to wash off accumulated paint.
3. Do not submerge the entire spray gun in solvent because:
   a. the lubricant in the gland packings will dissolve and the packings will dry out.
   b. the lubricant will dissolve causing harder operation and faster wear.
   c. residue from dirty solvent may clog the narrow air passages in the gun.
4. Wipe down the outside of the gun with solvent dampened rag.
5. Lubricate gun daily. Use a light machine oil on:
   a. fluid needle packing.
   b. air valve packing.
   c. fan control packing.
   d. trigger pivot point.

   Coat the fluid control spring with vaseline.

Caution: Never use lubricants containing silicone as this may cause finish defects.